# **World Resources Company**

## **RECYCLABLE MATERIAL PROFILE**

Form: FM-M01 **EXHIBIT A** 

Generator Name: Alaskan Co	pper Wo	rks					Con	npany	I.D. #: 2	22149-001-01	
A. Generator Information											
1. Address: 3200 Sixth Avenue South					3. Material EPA Waste Code: F006						
Andrew Control of the		<del></del>									
Seattle					4. Generator's EPA I.D. Number: WAD980738546						
WA 98124 2. Contact: Gerald Thompson					5. Generator's State I.D. Number:						
Title: Environmental Assistant										~~~	
B. Recyclable Material Characteristics											
1. Color(s): Brown	T	e (similar to)	7	7. Appearance			9. Free Liquids (EPA SW 846, Method 9095)				
	<b>✓</b> Wet	•		Homogenous		Not Present					
	Dry	•		<b>▼</b> nonlogenous			i Present		Пы	sent	
2. Odor (none,mild,strong)	San	•		Dilayarad			is		11. Rea	activity	
<u>None</u>	Pow			Bilayered		₩ No	t Present		<b>✓</b> Not	Reactive	
Description of Odor:				Multilau		esent			active		
	Other			Multilayered							
3. Moisture (wet,damp,dry)	8. Organi		16	Present		12. Radionuclides (ASTM D5928-96)					
Wet Percent Solids: 31.2	Not Pr	esent (< 1ppm)	amount in pr	entity comp on a wet	ounds and basis	✓ Not Detected					
4. pH 5. Ignitability	<b>√</b> Pass					13. Cyanide Gas HCN					
(EPA SW 846, (40 CFR §261.21)	V Pass					<b>√</b> Not	t Detected				
method 9040/9045) PASS	Fail					☐ De	tected			ppm	
pH: 8.12 @ 22.2°C FAIL		/Contont	an a day wais	ht basis in							
C. Analytical Data			on a dry weig								
Constituent *  1 Aluminum 1	Al	Content	Qualifier			tituent *		Conf		Qualifier	
2. Antimony 1,†	Sb	17700.0 ppm 28.7 ppm			Magnes Mangan		Mg Mn		.0 ppm .0 ppm	· · · · · · · · · · · · · · · · · · ·	
3. Arsenic 1.1	As	50.4 ppm			_		Hq		.8 ppm 1	<u></u>	
4. Barium 1,†	Ba	136.0 ppm			Nickel	_	Ni		.0 ppm 1		
5. Beryllium 1.†	Ве		M7				Se		.0 ppm		
6. Bismuth 1	Bi	62.4 ppm			Silver	1,†	Ag		.0 ppm 1	л2	
7. Cadmium 1.T	Cd	< 20.0 ppm		25.	Thalli	um 1,†	Tl	< 20	.0 ppm		
8. Calcium <sup>1</sup>	Ca	18100.0 ppm		26.			Sn	< 100	.0 ppm		
9 Chloride 4	Cl <sup>-</sup>	0.21 %		27.	Zinc 1,†		Zn	972	.0 ppm		
10 Chromium, Hexavalen		2311.8 ppm									
11. Chromium, Total <sup>1,†</sup>	Cr	45400.0 ppm		- [* A	* Analytical Procedure References						
12. Cobalt <sup>1</sup> 13. Copper <sup>1,†</sup>	Co	697.0 ppm 40900.0 ppm	IVIO		1. EPA Method SW846 3050 / 6010 (Digestion / Analysis)						
14. Cyanide, Amenable 3.†	Cu CN -	not analyzed		2. EPA Method SW846 3060 / 7196 (Extraction / Analysis)							
15. Cyanide, Total 3,†	CN -	< 32.0 ppm	73	3. EPA Method SW846 9010 / 9213 or 9014 (Distillation / Anaylsis)							
16. Fluoride 4	F-	0.45 %		4. HNO3 or H <sub>2</sub> O <sub>2</sub> / EPA Method SW846 9056 (Digestion / Analysis)							
17. Iron <sup>1</sup>	Fe	223000.0 ppm	M3		† Licensed Constituent						
18. Lead <sup>1.†</sup>	Pb	98.4 ppm									
				<del> </del>					<del></del>		
D. Certification											
I hereby certify that all information submitted in this profile is complete and accurate to the best of my knowledge and belief.											
Signed: Date: 7/16/10											
Title: Laboratory Manager AZ DHS #: AZ0586											

AZF004\\F21 revised 2/1/2007

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### **World Resources Company**

QA/QC DATA

Form: FM-M01 **EXHIBIT A** 

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

QA/QC Criteria: All analyses met method criteria unless otherwise noted.

**Explanation of Data Qualifiers:** 

M2 Matrix spike recovery was low; the associated blank spike recovery was acceptable.

M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The

associated blank spike recovery was acceptable.

M7 Matrix spike recovery was low. Data reported per ADEQ policy 0154.000.

Z3 The duplicate sample did not meet method acceptance limits due to the lack of sample homogeneity.

M1 Matrix spike recovery was high; the associated blank spike recovery was acceptable.

## **World Resources Company**

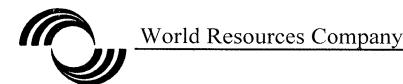
#### SAMPLE COLLECTION & ANALYSIS COMPLETION DATES

Form: FM-M01 **EXHIBIT A** 

Generator Name: Alaskan Copper Works

Company I.D. #: 22149-001-01

Constituent		Sample Date	Completion Date	Sample Technician	
1.	рн		01/19/2010 11:54	01/19/2010 15:00	LEONEL GARCIA
2.	Aluminum	Al	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
3.	Antimony	Sb	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
4.	Arsenic	As	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
5.	Barium	Ва	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
6.	Beryllium	Ве	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
7.	Bismuth	Вi	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
8.	Cadmium	Cd	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
9.	Calcium	Ca	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
10.	Chloride	Cl	01/19/2010 11:54	01/22/2010 12:00	LEONEL GARCIA
11.	Chromium, Hexavalent	Cr +6	01/19/2010 11:54	06/10/2010 15:00	LEONEL GARCIA
12.	Chromium, Total	Cr	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
13.	Cobalt	Co	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
14.	Copper	Cu	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
15.	Cyanide, Amenable	CN -			
16.	Cyanide, Total	CN	01/19/2010 11:54	02/02/2010 12:00	LEONEL GARCIA
17.	Fluoride	$\mathbf{F}$	01/19/2010 11:54	01/22/2010 12:00	LEONEL GARCIA
18.	Iron	Fe	01/19/2010 11:54	07/14/2010 15:35	LEONEL GARCIA
19.	Lead	Pb	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
20.	Magnesium	Mg	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
21.	Manganese	Mn	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
- 22.	Mercury	Нg	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
23.	Nickel	Ni	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
24.	Selenium	Se	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
25.	Silver	Ag	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
26.	Thallium	Tl	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
27.	Tin	Sn	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA
28.	Zinc	Zn	01/19/2010 11:54	07/14/2010 13:22	LEONEL GARCIA



8113 W. Sherman St. Tolleson, AZ 85353-4025 Tel: 800.972.1955 Fax: 623.936.9164

July 16, 2010

Mr. Gerald Thompson Environmental Assistant Alaskan Copper Works 3200 Sixth Avenue South Seattle, WA 98124

#### Dear Mr. Thompson:

In accordance with the recycling Agreement with your company, World Resources Company (WRC) provides a "RECYCLABLE MATERIAL PROFILE" (RMP) each contract year. Enclosed, for your records, is a completed RMP for the material generated at your plant. If a qualifier is indicated on the RMP, WRC has provided a quality assurance/quality control case narrative to validate the constituent's result(s).

The concentration of metals reported on the RMP is the total concentration of each metal on a dry basis. The recyclable material is prepared for analysis by first grid-sampling and then drying the selected sample in the laboratory oven at 103°-105° centigrade in order to obtain a homogeneous dry sample (Standard Methods For The Examination of Water and Wastewater, 15th Edition, published by the American Public Health Association 1980, Method 209A "Total Residue at 103°-105° centigrade"). Therefore, these results are generally higher than the concentrations of your material as it leaves your facility. You should multiply these dry concentrations by the decimal form of your percent solids (i.e. 50.0% = 0.50) to obtain the concentration of your material as it leaves your plant.

WRC appreciates your business and looks forward to a long and mutually beneficial recycling relationship. Please feel free to call me at (800) 972-1955 with any questions you may have regarding the enclosed RMP. Thank you for your interest in recycling.

Sincerely,

World Resources Company

Jason Hensley Laboratory Manager

**Enclosures**